ON THE BREEDING PLACE OF Platalea flavipes and Ardea pacifica.

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On the plains some 30 miles north of the Lachlan River is situated a large hollow or depression thickly overgrown with box trees; this hollow is about a mile wide, and winding through it in various directions are several deep channels, fringed with The average depth of this depression below the Polygonum. level of the surrounding plain is between four and five feet, but in the channels it is much deeper. For several years prior to 1870, very little water collected in this, and what there was, was confined to the deep channels; but in the year above mentioned, owing to the unusual quantity of rain, and the surrounding country having become harder from stocking, this place assumed the appearance of a lake, and with the exception of seasons of drought, large quantities of water have collected there, increasing or diminishing according to the time of year. It has thus become a favourite resort and breeding place of large numbers of water fowl, and amongst them Spoonbills, Platalea flavipes the only breeding place of these birds I ever met with. During the month of January 1877, I had occasion to pass this place, and my attention was drawn to a large number of Spoonbills constantly flying in and out of a thick patch of trees near the centre of the swamp, where I concluded they were breeding. The water at this time was low, and chiefly confined to the channels.

Wishing greatly to obtain the eggs of this particular bird, never having seen even a description of one of the species, I eagerly made for the clump of trees through a dense growth of "Roley Poley" bushes, that had sprung up as the water receded, riding as far as I could, and leaving my horse, when the ground became too soft. After some difficulty, owing to the boggy nature of the soil, I reached the trees in question, and found that my surmise as to this being a breeding place was correct, but to my intense disgust, I was too late, all the nests (amongst

which were a number of those of the White Fronted Heron-Ardea pacifica), containing young in various stages, four being the maximum. The nests of the spoonbills were large structures of sticks, loosely interlaced, with a considerable depression lined with the soft fibre of decayed bark. Those of the herons were much more scantily built, and were almost flat, composed of sticks loosely put together and entirely without lining. eggs as I subsequently found were placed on the bare sticks through the insterstices of which they could be seen from below. Finding there was no chance of obtaining a Spoonbills egg, or even the broken shell of one to give an idea of the colour &c., I turned my attention to the birds, old as well as young, and truly it was an amusing, and from a naturalist's point of view, a most interesting sight. The clump or rather belt was some fifty yards long, the trees composing it being low and gnarled, their crooked and distorted branches crossing one another and forming capital foundations for nests; an advantage the birds had evidently recognized, for every available place was occupied by a nest, either of Spoonbill or Heron. In some cases two or more nests were placed close together, and in these instances it was amusing to watch the conduct of the parent birds as one or other of them returned with food to its insatiable progeny; for in its hurry, and through the close proximity of the nests, it would alight on the wrong nest, an intrusion the others would fiercely resent, and a battle would occur, accompanied by loud angry croakings, which on one occasion resulted in a young one being knocked out of the nest during the struggle: at other times a ravenous youngster in its eagerness to obtain the coveted morsel brought by his unwearying parent, would overstretch himself and topple out of the nest, his descent being sometimes stopped by head, leg, or wing being caught in some forked branch, where he would hang feebly fluttering until death ended his sufferings. I saw many dead ones suspended in this way; in other cases the young one falling on

the soft ground or in the water, quickly became the prey of the crows and hawks of various kinds, which were having a "good time of it," whilst now and again a hawk apparently preferring game of his own capture, would swoop down on a nest and clutching a struggling, croaking victim, bear him off to some adjacent tree, there to be devoured at leisure. Meanwhile the flapping noise of the birds' wings as they flew to and fro, the hoarse croaking sounds emitted by both adults and young, the cries of the herons, the cawing of innumerable crows, and the shrill whistle of the eagle—Haliaster sphenurus—made up a Babel of sounds not soon forgotten, and altogether formed one of the most animated scenes in nature that it has been my fortune to witness. I have said these birds hatched four young ones, but judging from the mortality I saw amongst them, I should think that scarcely half that number arrived at maturity. I took a couple of the young Spoonbills home, and although not confined they became thoroughly domesticated.

Having occasion about two years subsequently to revisit my father's station, "Yandeenbah," from which this swamp is distant only a few miles, I availed myself of the opportunity to pay another visit to the breeding places of the Spoonbills; and as I felt sure in the event of the heronry being still occupied, I should this time be successful in obtaining eggs, I took a small bag in which to stow my spoil. On arrival at the place I found that owing to the recent and heavy rains the whole swamp was converted into alake, but to my great satisfaction I saw that the clump of trees was still tenanted by the Spoonbills. To tie up my horse and strip off my clothes was but the work of a few minutes and taking my bag I started. For some distance the water was shallow, reaching to my waist, but this was decidedly the worst of the trip, for the ground was covered with a dense growth of the terrible thorny plant, known in the district as "Roley Poley" bushes, which it was impossible to avoid, and of which I still retain a lively recollection. As the water deepened, I took to

swimming, and thus got clear of the "Roley Poleys," and with the exception of encountering a few snags and stumps made a rapid and uneventful voyage to within a short distance of my destination. Here again troubles commenced; the water shallowed and the dreaded "Roley Poleys" were as thick as ever. naturalist's spirit, however triumphed, and I made my way to the nearest tree; which contained three nests, from each of which a Spoonbill flew as I approached. Eager to secure my prize I commenced climbing the tree; but numbers of the large "Bulldog" ant had taken refuge in the branches, and of their presence I was soon painfully aware by numerous stings; but the Spoonbill's egg I was determined to have in spite of the ants, and with an occasional muttered imprecation at each additional sting, I at last had the gratification of beholding my first Spoonbill's eggs, which were rather long, and pointed, the colour white. Each of the three nests contained four eggs, and from where I stood, I could see into several other nests; none of which contained more than four. The Herons Inoticed, were also breeding, their nests containing the same number of eggs.

Having any quantity to choose from, I contented myself with some half dozen of the best looking eggs of both Heron and Spoonbill, taken from various nests. Whilst taking these eggs I discovered the nest of a Whistling Eagle in a tree a short distance away, and on which the female bird was sitting, doubtless with the idea of reaping a rich harvest for herself and young, in the not far distant future. In this—so far as her present embryo family were concerned, she was mistaken, for I soon had her fine pair of eggs transferred to my bag, and as there was nothing else to be obtained just there, I continued my exploration by visiting other parts of the lake, which resulted in discovering several additional species of nests and eggs, amongst which were two nests of the Nankeen Heron—(Nycticorax Caledonicus), each containing four eggs, about the same size and colour as those of Ardea pacifica, but of a paler tint. The nests were similar in

construction and position to those of A. pacifica. By this time my bag was pretty well full, so I made my way shorewards and returned home well pleased with the result of my day's labours, though smarting dreadfully from the combined effects of "Roley Poley" thorns, and the stings of ants, to say nothing of sunburned shoulders.

NOTES AND EXHIBITS.

Dr. Ewan exhibited a sample of nitrate of uranium, a most powerful irritant, also of caffeine. He gave an account of the preparation and characters of this drug, and remarked on its physiological action, it first producing spasm and then paralysis in dogs, rabbits, cats, birds, and fish; one grain injected into the vein of a small dog being sufficient to destroy life. He said that the peculiar effects produced by taking strong coffee were attributable to the presence of a certain percentage of caffeine. Dr. Ewan also exhibited specimens of citrate of caffeine, and a large specimen of the gum resin of *Eucalyptus globulus*, from near Launceston, Tasmania.

Dr. Cox, exhibited a specimen of Latirus Strangei, of A. Adams, collected from the sea shore at Bulli. This species had been so briefly recorded by Mr. Adams that it was difficult to identify; no measurement or figures being given. The length of this rare specimen was one inch and a-quarter. Mr. Strange was the first to find the species, but one specimen has since been collected by Mr. John Brazier, at the Bottle and Glass rocks, and one at Shark Island in Port Jackson. Dr. Cox also exhibited a number of fossil nuts and seeds which had been presented to him by Mr. William Newton, junr., who had obtained them at a depth of 210 feet in washdirt found under the basaltic rock in the shaft of the Great Extended claim, Forest Reefs, Orange. The specimens shown represented the species Rhytidocaryon